

**Amendments to the Claims**

Please cancel claims 1-8 without prejudice. Please add new claims 9-28 as shown below in the List of Claims.

**List of Claims**

- 1-8. Cancelled.
- 1 ~~9~~ (New) A process for obtaining a purified gas by removing polysulfanes from crude gas formed during the production of hydrogen sulfide, comprising:
- a) passing said crude gas through a wash system where said crude gas is brought into contact with a wash solution comprising water or methanol; and
  - b) collecting said purified gas from the wash solution of step a).
- 2 ~~10~~ (New) The process of claim <sup>1</sup>~~9~~, wherein said crude gas comprises greater than 80% by volume of  $H_2S$  and 100-2000 vpm of polysulfanes of the formula  $H_2S_n$ , wherein  $n = 2-8$ .
- 3 ~~11~~ (New) The process of claim <sup>2</sup>~~10~~, wherein said polysulfanes are present in said crude gas at 400-1500 vpm.
- 4 ~~12~~ (New) The process of claim <sup>1</sup>~~9~~, wherein said wash system is a jet washer.
- 5 ~~13~~ (New) The process of claim <sup>1</sup>~~9~~, further comprising a second wash step in which the purified gas produced in step a) is passed through a counter-current washer comprising an aqueous or methanolic solution.
- 6 ~~14~~ (New) The process of claim <sup>1</sup>~~9~~, further comprising a second wash step in which the purified gas produced in step a) is passed through an adsorber bed.
- 7 ~~15~~ (New) The process of claim <sup>1</sup>~~9~~, wherein relative to said crude gas, the polysulfanes in said purified gas have been reduced by 50-99.5%.

8 ~~16~~. (New) The process of claim ~~7~~<sup>1</sup>, wherein said process is carried out at a temperature of 0-150°C.

9 ~~17~~. (New) A process for obtaining a purified gas by removing polysulfanes from crude gas formed during the production of hydrogen sulfide, comprising:

- a) passing said crude gas through a wash system comprising an aqueous or methanolic solution containing 0.5-20 wt% of an alkali or alkaline earth hydroxide or oxide; and
- b) collecting said purified gas from the aqueous or methanolic solution of step a).

10 ~~18~~. (New) The process of claim ~~17~~<sup>9</sup>, wherein said crude gas comprises greater than 80% by volume of H<sub>2</sub>S and 100-2000 vpm of polysulfanes of the formula H<sub>2</sub>S<sub>n</sub>, wherein n = 2-8.

11 ~~19~~. (New) The process of claim ~~18~~<sup>10</sup>, wherein said polysulfanes are present in said crude gas at 400-1500 vpm.

12 ~~20~~. (New) The process of claim ~~19~~<sup>9</sup>, wherein relative to said crude gas, the polysulfanes in said purified gas have been reduced by 50-99.5%.

13 ~~21~~. (New) The process of claim ~~20~~<sup>9</sup>, wherein said wash system is a jet washer and said process further comprises a second wash step in which the purified gas of step a) is passed through either: a counter-current washer comprising an aqueous or methanolic solution; or an adsorber bed.

14 ~~22~~. (New) A process for obtaining a purified gas by removing polysulfanes from crude gas formed during the production of hydrogen sulfide, comprising:

- a) passing said crude gas through a wash system comprising an aqueous or methanolic solution containing 1-20 wt% of a compound selected from the group consisting of:

- i) an organic amine of the formula  $(C_nH_{2n+1})_xNH_y$ , where  $n = 1-3$ ,  
 $x = 2$  or  $3$ , and  $y = 0$  or  $1$ ;
  - ii) an amino alcohol of formula  $(C_nH_{2n+1}O)_xNH_y$ , where  $n = 1-3$ ,  
 $x = 2$  or  $3$ , and  $y = 0$  or  $1$ ; and
  - iii) ammonia;
- b) collecting said purified gas from the aqueous or methanolic solution of step a).

15<sup>23</sup>. <sup>14</sup> (New) The process of claim ~~22~~, wherein said compound is an organic amine of the formula  $(C_nH_{2n+1})_xNH_y$ , where  $n = 1-3$ ,  $x = 2$  or  $3$ , and  $y = 0$  or  $1$ .

16<sup>24</sup>. <sup>14</sup> (New) The process of claim ~~22~~, wherein said compound is an amino alcohol of formula  $(C_nH_{2n+1}O)_xNH_y$ , where  $n = 1-3$ ,  $x = 2$  or  $3$ , and  $y = 0$  or  $1$ .

17<sup>25</sup>. <sup>14</sup> (New) The process of claim ~~22~~, wherein said compound is ammonia.

18<sup>26</sup>. <sup>14</sup> (New) The process of claim ~~22~~, wherein said crude gas comprises greater than 80% by volume of  $H_2S$  and 100-2,000 vpm of polysulfanes of  $H_2S_n$ , where  $n = 2-8$ .

19<sup>27</sup>. <sup>14</sup> (New) The process of claim ~~22~~, wherein relative to said crude gas, the polysulfanes in said purified gas have been reduced by 50-99.5%

20<sup>28</sup>. <sup>14</sup> (New) The process of claim ~~22~~, wherein said wash system is a jet washer and said process further comprises a second wash step in which the purified gas of step a) is passed through either: a counter-current washer comprising an aqueous or methanolic solution; or an adsorber bed.